

EXHIBIT A

Title V Permit Issued

November 14, 2001



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: 11/14/01

Effective Date: 11/14/01

Expiration Date: 11/14/06

This document constitutes issuance of a Title V permit for Facility ID: 02-47-08-0961 to:
Lorain Tubular Company LLC
2199 E. 28th Street
Lorain, OH 44055

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

F001 (Roadways & Parking Lots) Paved & Aggregate Roadways and Parking Lots	K006 (No. 4 Seamless Mill No. 6 Pipe Coater) Pipe Coater	P038 (No. 3 Seamless Mill Sizing Reheat Furnace) Reheat Furnace
F003 (No. 3 Seamless Mill Reeling Machine) Reeler Unit (formerly emission unit ID Z005)	P001 (No. 3 Smls Mill Austenitizing (Walking Beam) Furnace) Re-heat Furnace	P039 (No. 4 Seamless Mill Rotary Furnace) Rotary Furnace
K002 (No. 3 Seamless Mill No. 2 Pipe Coater) Pipe Coater	P035 (No. 3 Seamless Mill Rotary Furnace) Rotary Furnace	P040 (No. 4 Seamless Mill Reheat Furnace) Reheat Furnace
K003 (No. 3 Seamless Mill No. 3 Pipe Coater) Pipe Coater	P036 (No. 3 Seamless Mill No. 1 Reheat Furnace) Reheat Furnace	P048 (No. 3 Seamless Mill Rotary Mill) Rotary Mill
K005 (No. 4 Seamless Mill No. 5 Pipe Coater) Pipe Coater	P037 (No. 3 Seamless Mill No. 2 Reheat Furnace) Reheat Furnace	

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330) 425-9171

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
 - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to

the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

- ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. Permit Shield

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but

excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

16. Off Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or

pollutants emitted, and any federally applicable requirement that would apply as a result of the change;

- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

18. Insignificant Activity

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

B. State Only Enforceable Section

1. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with

this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

1. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #49, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

F002 Storage Pile
T015 No. 3 Seamless Mill Fuel Oil Tank
T016 No. 4 Seamless Mill Fuel Oil Tank
T020 Tubular Hydraulic Oil Tank
Z025 East Wall Pipe Mill Garage Tank
Z031 No. 3 Seamless Mill - Plug Mill
Z032 No. 4 Seamless Mill - Mandrel Mill
L003 Safety Kleen Cleaning Tank Model No. 442
L004 Safety Kleen Cleaning Tank Model No. 441
L005 Safety Kleen Cleaning Tank Model No. 441
L006 Safety Kleen Cleaning Tank Model No. 441
L007 Safety Kleen Cleaning Tank Model No. 441
L008 Safety Kleen Cleaning Tank Model No. 441
L009 Safety Kleen Cleaning Tank Model No. 441
L010 Safety Kleen Cleaning Tank Model No. 441
L011 Safety Kleen Cleaning Tank Model No. 441
L012 Safety Kleen Cleaning Tank Model No. 441
L013 Safety Kleen Cleaning Tank Model No. 341
L014 Graymills Cleaning Tank Model No. 550
L015 Graymills Cleaning Tank Model No. 510
L016 Safety Kleen Cleaning Tank Model No. 301
L017 Graymills Cleaning Tank Model No. 560
L018 Safety Kleen Cleaning Tank Model No. 440
L019 Safety Kleen Cleaning Tank Model No. 440
L020 Safety Kleen Cleaning Tank Model No. 440
L021 Safety Kleen Cleaning Tank Model No. 440
L022 Safety Kleen Cleaning Tank Model No. 440
L023 Safety Kleen Cleaning Tank Model No. 440
L024 Safety Kleen Cleaning Tank Model No. 440
L025 Safety Kleen Cleaning Tank Model No. 440
L026 Safety Kleen Cleaning Tank Model No. 440
L027 Graymills Cleaning Tank Model No. 540
L028 Graymills Cleaning Tank Model No. 550
L029 Graymills Cleaning Tank Model No. 550
L030 Graymills Cleaning Tank Model No. 550
L031 Graymills Cleaning Tank Model No. 540
L032 Graymills Cleaning Tank Model No. 540

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a Permit to Install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Roadways & Parking Lots (F001)
Activity Description: Paved & Aggregate Roadways and Parking Lots

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paved roadways and parking areas (see Section A.2.a)	OAC rule 3745-17-07 (B)(8)(a)	Visible particulate emissions from any paved roadways and parking areas shall not exceed 10% opacity. See Section A.1.2.k.
	OAC rule 3745-17-08 (B), (B)(8), (B)(9)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.1.2.c, A.1.2.d, and A.1.2.f through A.1.2.j)
unpaved roadways and parking areas (see Section A.2.b)	OAC rule 3745-17-07 (B)(8)(a)	Visible particulate emissions from any unpaved roadways and parking areas shall not exceed 10% opacity. See Section A.1.2.k.
	OAC rule 3745-17-08 (B), (B)(2)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.1.2.e through A.1.2.j)

Facility Name: Lorain Tubular Company LLC
Facility ID: 02-47-08-0961
Emissions Unit: Roadways & Parking Lots (F001)

2. Additional Terms and Conditions

- 2.a The paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

paved roadways:	Approx. one-way mileage of road segment:
Grove St. entrance road (VT001)	0.10
Grove St. to #4 Seamless (VT002)	0.65
#4 Seamless to NW boundary access road (VT003)	0.15
NW boundary access road (VT004)	0.10
NW boundary access road to coil warehouse (VT005)	0.30
Charleston access road to #3 Seamless East (VT007)	0.40
Charleston St. access road (VT008)	0.25
Grove St. to Charleston access road (VT009)	0.25
South plant side access road to north plant side access road (VT010)	0.40
From segment #10 to #3 Seamless east (VT011)	0.25
Gantry crane pipe loading (VT015)	1.20
Seamless pipe loading (VT016)	0.30
paved parking areas:	Approx. one-way mileage of paved parking area:
Grove St. parking lot (VT013)	0.30
Main Office parking lot (VT014)	0.10

2. Additional Terms and Conditions (continued)

- 2.b** The unpaved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

unpaved roadways: Approx. one-way mileage of road segment:

North plant side access road (VT006)	0.60
Charleston St. access road (VT008a)	0.05
Access road to 4 seasons trailer (VT012)	0.13
Pipe warehouse truck road (VT017)	0.10
Bar coil warehouse truck road (VT018)	0.20

unpaved parking areas:

none

- 2.c** The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. The permittee has committed to treat the paved roadways and parking areas by employing the different control measures mentioned in OAC rule 3745-17-08(B) at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.d** The permittee shall employ reasonably available control measures on the unpaved shoulders of all paved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved shoulders of all paved roadways with suitable dust suppressant chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The permittee shall employ reasonably available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with suitable dust suppressant chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.f** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.g** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- 2.h** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

2. Additional Terms and Conditions (continued)

- 2.i Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.j Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.
- 2.k The emission limitation and rule citation reflect the settlement agreement reached between Ohio EPA and the iron and steel production facilities concerning the iron and steel facilities' appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule containing the limitation and rule citation was adopted by the Director of Ohio EPA in December, 1997. The USEPA and the iron and steel production facilities have agreed to consider the emission limitation and rule citation as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the limitation and rule citation as a revision to the Ohio SIP for particulate matter.

II. Operational Restrictions

1. Operational Restrictions Concerning the Use of Dust Suppressants

When a dust suppressant is used for controlling fugitive dust from the unpaved road segments and parking areas, the following restrictions apply:

- a. The permittee shall certify or possess certification that all dust suppressants used to control fugitive dust meet the PCB limitations set forth in 40 CFR 761, and that there are no listed hazardous wastes or characteristic hazardous wastes as set forth in 40 CFR 261.
- b. The permittee shall not apply used oil as defined by OAC rule 3745-279-01(A)(12) as a dust suppressant.
- c. The dust suppressant shall be applied in such a manner as to prevent pollution of waters of the State as required by the Ohio Revised Code, section 6111.

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:

paved roadways and parking areas minimum inspection frequency

Grove St. entrance road	weekly
Grove St. to #4 Seamless	weekly
#4 Seamless to NW boundary access road	weekly
NW boundary access road	weekly
NW boundary access road to coil warehouse	weekly
Charleston access road to #3 Seamless east	weekly
Charleston St. access road	daily
Grove St. to Charleston access road	weekly
South plant side access road to north plant side access road	weekly
From segment #10 to #3 Seamless east	weekly
Gantry crane pipe loading	weekly
Seamless pipe loading	weekly
Grove St. parking lot	weekly
Main Office parking lot	weekly

unpaved roadways and parking areas minimum inspection frequency

North plant side access road	weekly
Charleston St. access road	daily
Access road to 4 seasons trailer	daily
Pipe warehouse truck road	daily
Bar coil warehouse truck	daily

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented and for the paved roadways and parking areas, the types of control measures that were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 4.d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

Visible particulate emissions from any paved and unpaved roadways and parking areas shall not exceed 10% opacity.

Applicable Compliance Method:

Compliance with the emission limitation for the paved and unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standard of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraph (B)(3)(d) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Seamless Mill Reeling Machine (F003)
Activity Description: Reeler Unit (formerly emission unit ID Z005)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
No. 3 Seamless Mill Reeling Machines (East and West Reelers)	OAC rule 3745-17-07(B)(1)	See Section A.I.2.a. below.
	OAC rule 3745-17-08 (B)	See Section A.I.2.b below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a three-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.
- 2.b The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM). These measures shall include, but not be limited to, the following:
 - i. effective and permanent positioning of the lubricant material spray nozzles immediately before the shell enters the reelers so as to minimize emissions from the ends of the shells; and
 - ii. the application of water to the shell and burnishing rolls, as the shell is being mechanically worked, to reduce the generation of iron oxide dust particulates.

Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II. Operational Restrictions

1. The pressure of the water spray nozzle system for the reelers shall be maintained at a minimum of 15 psig when the reelers are in use.

III. Monitoring and/or Record Keeping Requirements

1. Until the required monitoring equipment is installed, as required in Section A.III.2. of this permit, the permittee shall inspect the water sprays daily to ensure that they are operating when the reelers are in use.
2. Within 2 months after the issuance of this permit, the permittee shall properly install, operate, and maintain equipment to monitor the water spray nozzle pressure while the reelers are in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall inspect the water sprays and record the water pressure on a daily basis.

III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from any building openings housing this emissions unit. These building openings shall include, but not limited to, doorways, windows, and roof monitors. The presence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any day when the water sprays were not operating while the emissions unit was in operation.
2. The permittee shall submit water pressure deviation (excursion) reports that identify all periods of time during which the water pressure did not comply with the allowable water pressure specified above.
3. The permittee shall submit written reports which (a) identify all days during which any visible particulate emissions were observed from any building openings housing this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. The permittee shall submit the required deviation (excursion) reports in accordance with Part I - General Terms and Conditions Section A.1.c.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

Visible fugitive particulate emissions shall not exceed 20% opacity as a three-minute average.

Applicable Compliance Method:

Compliance with the visible emission limitation for the No. 3 Seamless Mill Reeling Machines identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Seamless Mill No. 2 Pipe Coater (K002)

Activity Description: Pipe Coater

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
No.2 Seamless Pipe Coating Unit (Nordson continuous coating unit)	OAC rule 3745-31-05(A)(3) PTI No. 02-1973 OAC rule 3745-21-09(U)(1)(a)	VOC: 3.75 lbs per gallon of coating, excluding water and exempt solvents. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The maximum annual coating usage for this emissions unit shall not exceed 105,600 gallons, based upon a rolling, 12-month summation of the coating usage figures.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The coating usage for each month.
 - b. The rolling, 12-month summation of the coating usage, in gallons.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall collect and record the following information for each day of operation:
 - a. The name and identification number of each coating, as purchased and received.
 - b. The VOC content of each coating material (excluding water and exempt solvents), as purchased and received.
 - c. The VOC content of each solvent material.
 - d. The amount of each solvent material added to coating material per day.
 - e. The amount of each coating material used per day, excluding water and exempt solvents.
 - f. The daily, volume-weighted average VOC content of the coatings, as applied, in pounds per gallon of coating, excluding water and exempt solvents (calculated in accordance with the equation in A.V.1.a.).

IV. Reporting Requirements

1. Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install No. 02-1973, issued on June 5, 1985: Section A.IV.3. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes with the underlying reporting requirements in the Permit to Install.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month coating usage limitation.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the 3.75 lbs of VOC/gallon limitation, based on the equation in Section A.V.1.a. of this permit.
4. The permittee shall submit the required deviation (excursion) reports in accordance with Part I - General Terms and Conditions Section A.1.c.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

3.75 lbs of VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:

Compliance with the VOC content limitation shall be determined for each day by using the following equation:

$$E = [\text{Summation of } (A_i \cdot B_i + C_i \cdot D_i) \text{ for all coating materials and solvent materials employed}] / [\text{Summation of } (A_i + C_i) \text{ for all coating materials and solvent materials employed}]$$

Where:

E = VOC content of the applied coatings, in lbs per gallon, excluding water and exempt solvents

A_i = gallons of coating material i consumed per day (prior to any solvent additions), excluding water and exempt solvents

B_i = VOC content of coating material i as received, in lbs VOC per gallon, excluding water and exempt solvents

C_i = gallons of solvent material i added per day

D_i = VOC content of solvent material i, in lbs VOC per gallon

i = subscript denoting a coating material or solvent material employed (i = 1 to n)

n = total number of coating materials and solvent materials employed per day

Facility Name: **Lorain Tubular Company LLC**
Facility ID: **02-47-08-0961**
Emissions Unit: **No. 3 Seamless Mill No. 2 Pipe Coater (K002)**

V. Testing Requirements (continued)

- 1.b Compliance shall be based upon the record keeping requirements specified in Section III.2. USEPA Method 24 shall be used to determine the VOC content for each coating. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

The VOC content of each the solvent added to the coating material shall be determined based upon the formulation data.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Seamless Mill No. 3 Pipe Coater (K003)

Activity Description: Pipe Coater

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
No.2 Seamless Pipe Coating Unit (Nordson continuous coating unit)	OAC rule 3745-31-05(A)(3) PTI No. 02-1974 OAC rule 3745-21-09(U)(1)(a)	VOC: 3.75 lbs per gallon of coating, excluding water and exempt solvents. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The maximum annual coating usage for this emissions unit shall not exceed 74,000 gallons, based upon a rolling, 12-month summation of the coating usage figures.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The coating usage for each month.
 - b. The rolling, 12-month summation of the coating usage, in gallons.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall collect and record the following information for each day of operation:
 - a. The name and identification number of each coating, as purchased and received.
 - b. The VOC content of each coating material (excluding water and exempt solvents), as purchased and received.
 - c. The VOC content of each solvent material.
 - d. The amount of each solvent material added to coating material per day.
 - e. The amount of each coating material used per day, excluding water and exempt solvents.
 - f. The daily, volume-weighted average VOC content of the coatings, as applied, in pounds per gallon of coating, excluding water and exempt solvents (calculated in accordance with the equation in A.V.1.a.).

IV. Reporting Requirements

1. Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install No. 02-1973, issued on June 5, 1985: Section A.IV.3. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes with the underlying reporting requirements in the Permit to Install.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month coating usage limitation.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the 3.75 lbs of VOC/gallon limitation, based on the equation in Section A.V.1.a. of this permit.
4. The permittee shall submit the required deviation (excursion) reports in accordance with Part I - General Terms and Conditions Section A.1.c.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

3.75 lbs of VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:

Compliance with the VOC content limitation shall be determined for each day by using the following equation:

$$E = [\text{Summation of } (A_i \cdot B_i + C_i \cdot D_i) \text{ for all coating materials and solvent materials employed}] / [\text{Summation of } (A_i + C_i) \text{ for all coating materials and solvent materials employed}]$$

Where:

E = VOC content of the applied coatings, in lbs per gallon, excluding water and exempt solvents

A_i = gallons of coating material i consumed per day (prior to any solvent additions), excluding water and exempt solvents

B_i = VOC content of coating material i as received, in lbs VOC per gallon, excluding water and exempt solvents

C_i = gallons of solvent material i added per day

D_i = VOC content of solvent material i, in lbs VOC per gallon

i = subscript denoting a coating material or solvent material employed (i = 1 to n)

n = total number of coating materials and solvent materials employed per day

Facility Name: Lorain Tubular Company LLC
Facility ID: 02-47-08-0961
Emissions Unit: No. 3 Seamless Mill No. 3 Pipe Coater (K003)

V. Testing Requirements (continued)

- 1.b Compliance shall be based upon the record keeping requirements specified in Section III.2. USEPA Method 24 shall be used to determine the VOC content for each coating. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

The VOC content of each the solvent added to the coating material shall be determined based upon the formulation data.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 4 Seamless Mill No. 5 Pipe Coater (K005)

Activity Description: Pipe Coater

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
No.2 Seamless Pipe Coating Unit (Nordson continuous coating unit)	OAC rule 3745-31-05(A)(3) PTI No. 02-1975 OAC rule 3745-21-09(U)(1)(a)	VOC: 3.75 lbs per gallon of coating, excluding water and exempt solvents. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The maximum annual coating usage for this emissions unit shall not exceed 43,500 gallons, based upon a rolling, 12-month summation of the coating usage figures.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The coating usage for each month.
 - b. The rolling, 12-month summation of the coating usage, in gallons.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall collect and record the following information for each day of operation:
 - a. The name and identification number of each coating, as purchased and received.
 - b. The VOC content of each coating material (excluding water and exempt solvents), as purchased and received.
 - c. The VOC content of each solvent material.
 - d. The amount of each solvent material added to coating material per day.
 - e. The amount of each coating material used per day, excluding water and exempt solvents.
 - f. The daily, volume-weighted average VOC content of the coatings, as applied, in pounds per gallon of coating, excluding water and exempt solvents (calculated in accordance with the equation in A.V.1.a.).

IV. Reporting Requirements

1. Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install No. 02-1973, issued on June 5, 1985: Section A.IV.3. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes with the underlying reporting requirements in the Permit to Install.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month coating usage limitation.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the 3.75 lbs of VOC/gallon limitation, based on the equation in Section A.V.1.a. of this permit.
4. The permittee shall submit the required deviation (excursion) reports in accordance with Part I - General Terms and Conditions Section A.1.c.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

3.75 lbs of VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:

Compliance with the VOC content limitation shall be determined for each day by using the following equation:

$$E = [\text{Summation of } (A_i \cdot B_i + C_i \cdot D_i) \text{ for all coating materials and solvent materials employed}] / [\text{Summation of } (A_i + C_i) \text{ for all coating materials and solvent materials employed}]$$

Where:

E = VOC content of the applied coatings, in lbs per gallon, excluding water and exempt solvents

A_i = gallons of coating material i consumed per day (prior to any solvent additions), excluding water and exempt solvents

B_i = VOC content of coating material i as received, in lbs VOC per gallon, excluding water and exempt solvents

C_i = gallons of solvent material i added per day

D_i = VOC content of solvent material i, in lbs VOC per gallon

i = subscript denoting a coating material or solvent material employed (i = 1 to n)

n = total number of coating materials and solvent materials employed per day

Facility Name: Lorain Tubular Company LLC
Facility ID: 02-47-08-0961
Emissions Unit: No. 4 Seamless Mill No. 5 Pipe Coater (K005)

V. Testing Requirements (continued)

- 1.b** Compliance shall be based upon the record keeping requirements specified in Section III.2. USEPA Method 24 shall be used to determine the VOC content for each coating. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

The VOC content of each the solvent added to the coating material shall be determined based upon the formulation data.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: Lorain Tubular Company LLC
Facility ID: 02-47-08-0961
Emissions Unit: No. 4 Seamless Mill No. 6 Pipe Coater (K006)

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 4 Seamless Mill No. 6 Pipe Coater (K006)

Activity Description: Pipe Coater

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
No.2 Seamless Pipe Coating Unit (Nordson continuous coating unit)	OAC rule 3745-31-05(A)(3) PTI No. 02-1976 OAC rule 3745-21-09(U)(1)(a)	VOC: 3.75 lbs per gallon of coating, excluding water and exempt solvents. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The maximum annual coating usage for this emissions unit shall not exceed 43,500 gallons, based upon a rolling, 12-month summation of the coating usage figures.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The coating usage for each month.
 - b. The rolling, 12-month summation of the coating usage, in gallons.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall collect and record the following information for each day of operation:
 - a. The name and identification number of each coating, as purchased and received.
 - b. The VOC content of each coating material (excluding water and exempt solvents), as purchased and received.
 - c. The VOC content of each solvent material.
 - d. The amount of each solvent material added to coating material per day.
 - e. The amount of each coating material used per day, excluding water and exempt solvents.
 - f. The daily, volume-weighted average VOC content of the coatings, as applied, in pounds per gallon of coating, excluding water and exempt solvents (calculated in accordance with the equation in A.V.1.a.).

IV. Reporting Requirements

1. Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install No. 02-1973, issued on June 5, 1985: Section A.IV.3. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes with the underlying reporting requirements in the Permit to Install.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month coating usage limitation.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the 3.75 lbs of VOC/gallon limitation, based on the equation in Section A.V.1.a. of this permit.
4. The permittee shall submit the required deviation (excursion) reports in accordance with Part I - General Terms and Conditions Section A.1.c.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

3.75 lbs of VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:

Compliance with the VOC content limitation shall be determined for each day by using the following equation:

$$E = [\text{Summation of } (A_i \cdot B_i + C_i \cdot D_i) \text{ for all coating materials and solvent materials employed}] / [\text{Summation of } (A_i + C_i) \text{ for all coating materials and solvent materials employed}]$$

Where:

E = VOC content of the applied coatings, in lbs per gallon, excluding water and exempt solvents

A_i = gallons of coating material i consumed per day (prior to any solvent additions), excluding water and exempt solvents

B_i = VOC content of coating material i as received, in lbs VOC per gallon, excluding water and exempt solvents

C_i = gallons of solvent material i added per day

D_i = VOC content of solvent material i, in lbs VOC per gallon

i = subscript denoting a coating material or solvent material employed (i = 1 to n)

n = total number of coating materials and solvent materials employed per day

Facility Name: Lorain Tubular Company LLC
Facility ID: 02-47-08-0961
Emissions Unit: No. 4 Seamless Mill No. 6 Pipe Coater (K006)

V. Testing Requirements (continued)

- 1.b Compliance shall be based upon the record keeping requirements specified in Section III.2. USEPA Method 24 shall be used to determine the VOC content for each coating. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

The VOC content of each the solvent added to the coating material shall be determined based upon the formulation data.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Smls Mill Austenitizing (Walking Beam) Furnace (P001)
Activity Description: Re-heat Furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Natural gas fired walking beam reheat furnace with maximum heat input capacity of 39 MMBtu/hr	OAC rule 3745-31-05(A)(3) PTI No. 02-13781	NOx: 0.13 lb/MMBtu (as measured at the maximum firing condition), 5.07 lbs/hr, 22.21 tpy CO: 3.28 lbs/hr, 14.30 tpy OC: 0.42 lb/hr, 1.84 tpy PE/PM10: 0.30 lb/hr, 1.30 tpy SO2: 0.023 lb/hr, 0.10 tpy
	OAC rule 3745-17-11	Visible particulate emissions shall not exceed 5% opacity as a 6-minute average.
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall use only natural gas as fuel for this emissions unit.

III. Monitoring and/or Record Keeping Requirements

- For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- The permittee shall maintain records of the hours of operation for this emissions unit, for the purpose of calculating the actual annual emissions of each regulated pollutant.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following methods (s):

- 1.a Emission Limitations:

0.13 lb NOx per million Btu

Applicable Compliance Method:

Within 3 months after the issuance of this permit and within 6 months prior to the expiration of this permit, the permittee shall conduct or have conducted an emission test for this emissions unit in order to demonstrate compliance with the allowable mass emission rate for oxides of nitrogen. The compliance tests shall be conducted in accordance with the test methods and procedures specified in Method 7 or 7E of 40 CFR Part 60, Appendix A while the Austenizing Walking Beam Furnace is operating at maximum capacity. The gas firing burners of the Austenizing Walking Beam Furnace shall be operated at the highest firing condition rate during compliance testing to determine the NOx emission rate in lb/MMBtu.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

- 1.b Emission Limitation:

5.07 lbs of NOx per hour

Applicable Compliance Method:

If required, emission tests shall be conducted in accordance with the test methods and procedures specified in Method 7 or 7E of 40 CFR Part 60, Appendix A while the emissions unit is operating at maximum capacity.

- 1.c Emission Limitation:

22.21 tons of NOx per year

Applicable Compliance Method:

Compliance shall be determined by multiplying the hourly NOx emission rate (in pounds per hour) by the actual hours of operation per year, and dividing by 2,000 lbs/ton.

V. Testing Requirements (continued)

1.d Emission Limitation:

3.28 lbs/hr of CO

Applicable Compliance Method:

Compliance may be determined by multiplying the maximum heat input of 39 MMBtu/hr by the emission factor of 84 lbs of CO/MM scf and dividing by 1000 Btu (from AP-42, Table 1.4-1, 7/98 version). If required, emission tests shall be conducted in accordance with the test methods and procedures specified in Method 10E of 40 CFR Part 60, Appendix A while the emissions unit is operating at maximum capacity.

1.e Emission Limitation:

14.30 tons of CO per year

Applicable Compliance Method:

Compliance may be determined by multiplying the hourly CO emission rate (in pounds per hour) by the actual hours of operation per year, and dividing by 2,000 lbs/ton.

1.f Emission Limitation:

0.42 lbs/hr of OC

Applicable Compliance Method:

Compliance may be determined by multiplying the maximum heat input of 39 MMBtu/hr by the emission factor of 11 lbs of OC/MM scf and dividing by 1020 Btu (from AP-42, Table 1.4-2, 7/98 version). If required, emission tests shall be conducted in accordance with the test methods and procedures specified in Method 25 or 25A of 40 CFR Part 60, Appendix A while the emissions unit is operating at maximum capacity.

1.g Emission Limitation:

1.84 tons of OC per year

Applicable Compliance Method:

Compliance shall be determined by multiplying the hourly OC emission rate (in pounds per hour) by the hours of operation per year, and dividing by 2,000 lbs/ton.

1.h Emission Limitation:

0.30 lbs/hr of PE/PM10

Applicable Compliance Method:

If required, emission tests shall be performed in accordance with 40 CFR Part 60, Appendix A, Method 1-5 and the procedures specified in OAC rule 3745-17-03 (B)(1).

1.i Emission Limitation:

1.30 tons of PE/PM10 per year

Applicable Compliance Method:

Compliance shall be determined by multiplying the actual heat input of 39 MMBtu/hr by the emission factor of 1.9 lbs of PE/MM scf and dividing by 1000 Btu (from AP-42, Table 1.4-2, 7/98 version). The product shall then be multiplied by the actual hours of operation per year, and dividing by 2,000 lbs/ton.

V. Testing Requirements (continued)

1.j Emission Limitation:

0.023 lb/hr of SO₂

Applicable Compliance Method:

Compliance may be determined by multiplying the actual heat input of 39 MMBtu/hr by the emission factor of 0.6 lb of SO₂/MM scf and dividing by 1000 Btu (from AP-42, Table 1.4-2, 7/98 version). If required, emission tests shall be conducted in accordance with the test methods and procedures specified in Method 6 of 40 CFR Part 60, Appendix A while the emissions unit is operating at maximum capacity.

1.k Emission Limitation:

0.10 ton of SO₂ per year

Applicable Compliance Method:

Compliance shall be determined by multiplying the hourly SO₂ emission rate (in pounds per hour) by the actual hours of operation per year, and dividing by 2,000 lbs/ton.

1.l Emission Limitation:

5% opacity of visible particulate emissions as a 6-minute average

Applicable Compliance Method:

Compliance with the visible emission limitation for the walking beam furnace identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(1) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Seamless Mill Rotary Furnace (P035)

Activity Description: Rotary Furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Natural gas fired No.3 Seamless Mill Rotary Furnace with maximum heat input capacity of 296 MMBtu per hour	OAC rule 3745-17-11	See Section A.I.2.a. below.
	OAC rule 3745-17-07(A)	See Section A.I.2.b. below.
	OAC rule 3745-18-53(E)(4)	SO ₂ : 1.98 lbs per MMBtu of actual heat input

2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following methods (s):

Facility Name: Lorain Tubular Company LLC
Facility ID: 02-47-08-0961
Emissions Unit: No. 3 Seamless Mill Rotary Furnace (P035)

V. Testing Requirements (continued)

1.a Emission Limitation:

1.98 lbs of SO₂ per MMBtu of actual heat input

Applicable Compliance Method:

Compliance may be determined by dividing the emission factor of 0.60 pound of SO₂ per MM scf of natural gas from AP-42, Table 1.4-2 (July, '98 version) by 1020 Btu/cf. If required, emission tests shall be conducted in accordance with the test methods and procedures specified in Method 6 of 40 CFR Part 60, Appendix A while the emissions unit is operating at maximum capacity.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Seamless Mill No. 1 Reheat Furnace (P036)

Activity Description: Reheat Furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Natural gas fired No.1 Reheat Furnace with maximum heat input capacity of 30.8 MMBtu per hour, stationed in No. 3 Seamless Mill	OAC rule 3745-17-11	See Section A.I.2.a. below.
	OAC rule 3745-17-07(A)	See Section A.I.2.b. below.
	OAC rule 3745-31-05 (PTI # 02-7768)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-18-53.
	OAC rule 3745-18-53(E)(4)	See Section A.I.2.c. below. SO ₂ : 1.98 lbs per MMBtu of actual heat input

2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c Pursuant to paragraph 9 of the 'Supplemental Information/Additional Special Terms and Conditions' in PTI No. 02-7768, issued July 26, 1995, the permittee shall ensure that the emissions from the low NO_x natural gas burners, which replaced the conventional burners on the No. 1 Reheat Furnace at the No. 3 Seamless Pipe Mill, shall not exceed 0.15 lb NO_x per MMBtu (as measured at the maximum firing condition).

II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emission unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:

1.98 lbs of SO₂ per MMBtu of actual heat input

Applicable Compliance Method:

Compliance may be determined by dividing the emission factor of 0.60 pound of SO₂ per MM scf of natural gas from AP-42, Table 1.4-2 (July, '98 version) by 1020 Btu/cf. If required, emission tests shall be conducted in accordance with the test methods and procedures specified in Method 6 of 40 CFR Part 60, Appendix A while the emissions unit is operating at maximum capacity.

- 1.b Emission Limitations:

0.15 lb NO_x per million Btu

Applicable Compliance Method:

Within 3 months after the issuance of this permit and within 6 months prior to the expiration of this permit, the permittee shall conduct or have conducted an emission test for this emissions unit in order to demonstrate compliance with the allowable mass emission rate for oxides of nitrogen. The compliance tests shall be conducted in accordance with the test methods and procedures specified in Method 7 or 7E of 40 CFR Part 60, Appendix A while the No. 1 Reheat Furnace is operating at maximum capacity. The gas firing burners of the No. 1 Reheat Furnace shall be operated at the highest firing condition rate during compliance testing to determine the NO_x emission rate in lb/MMBtu.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Seamless Mill No. 2 Reheat Furnace (P037)

Activity Description: Reheat Furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Natural gas fired No.2 Reheat Furnace with maximum heat input capacity of 58.8 MMBtu per hour, stationed in No. 3 Seamless Mill	OAC rule 3745-17-11	See Section A.1.2.a. below.
	OAC rule 3745-17-07(A)	See Section A.1.2.b. below.
	OAC rule 3745-31-05 (PTI # 02-7768)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-18-53.
	OAC rule 3745-18-53(E)(4)	See Section A.1.2.c. below. SO ₂ : 1.98 lbs per MMBtu of actual heat input

2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c Pursuant to paragraph 9 of the 'Supplemental Information/Additional Special Terms and Conditions' in PTI No. 02-7768, issued July 26, 1995, the permittee shall ensure that the emissions from the low NO_x natural gas burners, which replaced the conventional burners on the No. 2 Reheat Furnace at the No. 3 Seamless Pipe Mill, shall not exceed 0.15 lb NO_x per MMBtu (as measured at the maximum firing condition).

II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emission unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:

1.98 lbs of SO₂ per MMBtu of actual heat input

Applicable Compliance Method:

Compliance may be determined by dividing the emission factor of 0.60 pound of SO₂ per MM scf of natural gas from AP-42, Table 1.4-2 (July, '98 version) by 1020 Btu/cf. If required, emission tests shall be conducted in accordance with the test methods and procedures specified in Method 6 of 40 CFR Part 60, Appendix A while the emissions unit is operating at maximum capacity.

- 1.b Emission Limitations:

0.15 lb NO_x per million Btu

Applicable Compliance Method:

Within 3 months after the issuance of this permit and within 6 months prior to the expiration of this permit, the permittee shall conduct or have conducted an emission test for this emissions unit in order to demonstrate compliance with the allowable mass emission rate for oxides of nitrogen. The compliance tests shall be conducted in accordance with the test methods and procedures specified in Method 7 or 7E of 40 CFR Part 60, Appendix A while the No.2 Reheat Furnace is operating at maximum capacity. The gas firing burners of the No.2 Reheat Furnace shall be operated at the highest firing condition rate during compliance testing to determine the NO_x emission rate in lb/MMBtu.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Seamless Mill Sizing Reheat Furnace (P038)
Activity Description: Reheat Furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Natural gas fired Sizing Reheat Furnace with maximum heat input capacity of 57.5 MMBtu per hour, stationed in No. 3 Seamless Mill	OAC rule 3745-17-11	See Section A.I.2.a. below.
	OAC rule 3745-17-07(A)	See Section A.I.2.b. below.
	OAC rule 3745-31-05 (PTI # 02-7768)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-18-53.
	OAC rule 3745-18-53(E)(4)	See Section A.I.2.c. below. SO ₂ : 1.98 lbs per MMBtu of actual heat input

2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c Pursuant to paragraph 9 of the 'Supplemental Information/Additional Special Terms and Conditions' in PTI No. 02-7768, issued July 26, 1995, the permittee shall ensure that the emissions from the low NO_x natural gas burners, which replaced the conventional burners on the Sizing Reheat Furnace at the No. 3 Seamless Pipe Mill, shall not exceed 0.15 lb NO_x per MMBtu (as measured at the maximum firing condition).

II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emission unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

Facility Name: Lorain Tubular Company LLC
Facility ID: 02-47-08-0961
Emissions Unit: No. 3 Seamless Mill Sizing Reheat Furnace (P038)

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:

1.98 lbs of SO₂ per MMBtu of actual heat input

Applicable Compliance Method:

Compliance may be determined by dividing the emission factor of 0.60 pound of SO₂ per MM scf of natural gas from AP-42, Table 1.4-2 (July, '98 version) by 1020 Btu/cf. If required, emission tests shall be conducted in accordance with the test methods and procedures specified in Method 6 of 40 CFR Part 60, Appendix A while the emissions unit is operating at maximum capacity.

- 1.b Emission Limitations:

0.15 lb NO_x per million Btu

Applicable Compliance Method:

Within 3 months after the issuance of this permit and within 6 months prior to the expiration of this permit, the permittee shall conduct or have conducted an emission test for this emissions unit in order to demonstrate compliance with the allowable mass emission rate for oxides of nitrogen. The compliance tests shall be conducted in accordance with the test methods and procedures specified in Method 7 or 7E of 40 CFR Part 60, Appendix A while the Sizing Reheat Furnace is operating at maximum capacity. The gas firing burners of the Sizing Reheat Furnace shall be operated at the highest firing condition rate during compliance testing to determine the NO_x emission rate in lb/MMBtu.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

None

Facility Name: Lorain Tubular Company LLC
Facility ID: 02-47-08-0961
Emissions Unit: No. 3 Seamless Mill Sizing Reheat Furnace (P038)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: Lorain Tubular Company LLC
Facility ID: 02-47-08-0961
Emissions Unit: No. 4 Seamless Mill Rotary Furnace (P039)

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 4 Seamless Mill Rotary Furnace (P039)

Activity Description: Rotary Furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Natural gas fired No.4 Seamless Mill Rotary Furnace with maximum heat input capacity of 195.4 MMBtu per hour	OAC rule 3745-17-11	See Section A.I.2.a. below.
	OAC rule 3745-17-07(A)	See Section A.I.2.b. below.
	OAC rule 3745-18-53(E)(6)	SO ₂ : 178 pounds per hour

2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

Facility Name: Lorain Tubular Company LLC
Facility ID: 02-47-08-0961
Emissions Unit: No. 4 Seamless Mill Rotary Furnace (P039)

V. Testing Requirements (continued)

1.a Emission Limitation:

178 pounds of SO₂ per hour
Applicable Compliance Method:

Compliance may be determined by dividing the emission factor of 0.60 pound of SO₂ per MM scf of natural gas from AP-42, Table 1.4-2 (July, '98 version) by 1020 Btu/cf and then multiplying by the maximum heat input of 195.4 MMBtu/hr. If required, emission tests shall be conducted in accordance with the test methods and procedures specified in Method 6 of 40 CFR Part 60, Appendix A while the emissions unit is operating at maximum capacity.

VI. Miscellaneous Requirements

None

Facility Name: Lorain Tubular Company LLC
Facility ID: 02-47-08-0961
Emissions Unit: No. 4 Seamless Mill Rotary Furnace (P039)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 4 Seamless Mill Reheat Furnace (P040)

Activity Description: Reheat Furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Natural gas fired No.4 Seamless Mill reheat furnace with maximum heat input capacity of 50.9 MMBtu per hour	OAC rule 3745-31-05(A)(3) (PTI No. 02-4153)	PE: 0.36 lb per hour SO ₂ : 0.03 lb per hour NO _x : 7.64 lbs per hour CO: 4.19 lbs per hour VOC: 0.27 lb per hour
	OAC rule 3745-17-11	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07.
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05 (PTI # 02-7768)	See Section A.I.2.a. below.
	OAC rule 3745-18-53(E)(4)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07.
		See Section A.I.2.b. below.
		The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
- 2.b Pursuant to paragraph 9 of the 'Supplemental Information/Additional Special Terms and Conditions' in PTI No. 02-7768, issued July 26, 1995, the permittee shall ensure that the emissions from the low NO_x natural gas burners, which replaced the conventional burners on the Reheat Furnace at the No. 4 Seamless Pipe Mill, shall not exceed 0.15 lb NO_x per MMBtu (as measured at the maximum firing condition).

II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitations:

7.64 lbs of NO_x per hour (BAT limit);
0.15 lb of NO_x per MMBtu (PTI # 02-7768)

Applicable Compliance Method:

Within 6 months after the issuance of this permit and within 6 months prior to expiration of this permit, the permittee shall conduct, or have conducted, an emission test for this emissions unit in order to demonstrate compliance with the allowable mass emission rate for oxides of nitrogen. The compliance tests shall be conducted in accordance with the test methods and procedures specified in Method 7 or 7E of 40 CFR Part 60, Appendix A while the Reheat Furnace is operating at maximum capacity. The gas firing burners of the Reheat Furnace shall be operated at the highest firing condition rate during compliance testing to determine the NO_x emission rate in lb/MMBtu and lbs/hr.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

1.b Emission Limitation:

0.36 lb of PE per hour

Applicable Compliance Method:

If required, emission tests shall be conducted in accordance with the test methods and procedures specified in Method 5 of 40 CFR Part 60, Appendix A while the emissions unit is operating at maximum capacity.

Facility Name: Lorain Tubular Company LLC
Facility ID: 02-47-08-0961
Emissions Unit: No. 4 Seamless Mill Reheat Furnace (P040)

V. Testing Requirements (continued)

1.c Emission Limitation:

0.03 lb of SO₂ per hour

Applicable Compliance Method:

Compliance may be determined by multiplying the emission factor of 0.6 lb/MM cf of natural gas from AP-42, Table 1.4-2 (July '98 version) by the maximum heat input of 50.9 MMBtu/hr, and dividing by 1020 Btu/cf. If required, emission tests shall be conducted in accordance with the test methods and procedures specified in Method 6 of 40 CFR Part 60, Appendix A while the emissions unit is operating at maximum capacity.

1.d Emission Limitation:

4.19 lbs of CO per hour

Applicable Compliance Method:

Compliance may be determined by multiplying the emission factor of 84 lbs/MM cf of natural gas from AP-42, Table 1.4-1 (February '98 version) by the maximum heat input of 50.9 MMBtu/hr, and dividing by 1020 Btu/cf. If required, emission tests shall be conducted in accordance with the test methods and procedures specified in Method 10 of 40 CFR Part 60, Appendix A while the emissions unit is operating at maximum capacity.

1.e Emission Limitation:

0.27 lb of VOC per hour

Applicable Compliance Method:

Compliance may be determined by multiplying the emission factor of 5.5 lbs/MM cf of natural gas from AP-42, Table 1.4-2 (July '98 version) by the maximum heat input of 50.9 MMBtu/hr, and dividing by 1020 Btu/cf. If required, emission tests shall be conducted in accordance with the test methods and procedures specified in Method 25 or 25A of 40 CFR Part 60, Appendix A while the emissions unit is operating at maximum capacity.

1.f Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a six-minute average.

Applicable Compliance Method:

Compliance with the visible emission limitation for the No. 4 Seamless Mill Reheat Furnace identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

VI. Miscellaneous Requirements

None

Facility Name: Lorain Tubular Company LLC
Facility ID: 02-47-08-0961
Emissions Unit: No. 4 Seamless Mill Reheat Furnace (P040)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Seamless Mill Rotary Mill (P048)

Activity Description: Rotary Mill

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
No. 3 Seamless Mill Rotary Mill, equipped with a cyclone separator and a venturi wet scrubber	OAC rule 3745-17-07(A)(1)	The emission limitation specified by the rule is less stringent than the emission limitation established pursuant to OAC rule 3745-17-08(B).
	OAC rule 3745-17-07(B)(1)	The emission limitation specified by the rule is less stringent than the emission limitation established pursuant to OAC rule 3745-17-08(B).
	OAC rule 3745-17-08(B)	See Section A.1.2.a below.
	OAC rule 3745-17-11	PE: 13.4 lbs per hour

2. Additional Terms and Conditions

- 2.a The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM). These measures shall include, but not be limited to, the use of localized hooding over the emissions unit, and venting of the particulate emissions to the cyclone separator and the venturi scrubber.

The collection efficiency shall be sufficient to eliminate visible particulate emissions of fugitive dust from the building housing this emissions unit.

All captured emissions from the No. 3 Seamless Mill Rotary Mill shall be routed to the cyclone separator, and all emissions from the cyclone separator shall be vented to the venturi scrubber.

The control equipment employed shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions from the exhaust stack(s), whichever is less stringent.

II. Operational Restrictions

1. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 34 inches of water at all times while the emissions unit is in operation.
2. The scrubber water flow rate shall be continuously maintained at a value of not less than 590 gallons per minute at all times while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. The pressure drop across the scrubber, in inches of water, on a once per shift basis.
 - b. The scrubber water flow rate, in gallons per minute, on a once per shift basis.
 - c. The operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from any building openings housing this emissions unit. These building openings shall include, but not limited to, doorways, windows, and roof monitors. The presence of any abnormal visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
 - a. The static pressure drop across the scrubber.
 - b. The scrubber water flow rate.
2. The permittee shall submit quarterly summaries of the operating times for this emissions unit and the associated control equipment and monitoring equipment. The quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.
3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from any building openings housing this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:

No visible emissions of fugitive dust from the building.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with USEPA Method 22. The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

V. Testing Requirements (continued)

1.b Emission Limitation:

0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

Within 6 months prior to the expiration of this permit, the permittee shall conduct or have conducted an emission test for this emissions unit in order to demonstrate compliance with the allowable mass emission rates for particulate matter. The compliance test shall be conducted in accordance with the test methods and procedures specified in Method 5 of 40 CFR Part 60, Appendix A while the emissions unit is operating at maximum capacity.

The No. 3 Seamless Rotary Mill shall be deemed in compliance if the stack test results document a particulate emission rate that is less than the combined emission limit of 15.95 lbs/hr (based on the allowable from OAC rule 3745-17-08 $[0.030 \text{ gr/dscf} \times (57,535 - 47,600) \text{ dscfm} \times 60 \text{ min/hr} \times 1 \text{ lb/7000 gr}]$ plus the allowable of 13.4 lbs/hr from OAC rule 3745-17-11, Fig. II). The value of 57,535 dscfm was the recorded airflow from the scrubber during a stack test on the No. 3 Seamless Rotary Mill conducted on March 24, 1999. The value of 47,600 dscfm was the recorded stack airflow in 1968.

1.c Emission Limitation:

13.4 lbs of particulate emission per hour

Applicable Compliance Method:

Within 6 months prior to the expiration of this permit, the permittee shall conduct or have conducted an emission test for this emissions unit in order to demonstrate compliance with the allowable mass emission rates for particulate matter. The compliance test shall be conducted in accordance with the test methods and procedures specified in Method 5 of 40 CFR Part 60, Appendix A while the emissions unit is operating at maximum capacity.

The No. 3 Seamless Rotary Mill shall be deemed in compliance if the stack test results document a particulate emission rate that is less than the combined emission limit of 15.95 lbs/hr (based on the allowable from OAC rule 3745-17-08 $[0.030 \text{ gr/dscf} \times (57,535 - 47,600) \text{ dscfm} \times 60 \text{ min/hr} \times 1 \text{ lb/7000 gr}]$ plus the allowable of 13.4 lbs/hr from OAC rule 3745-17-11, Fig. II). The value of 57,535 dscfm was the recorded airflow from the scrubber during a stack test on the No. 3 Seamless Rotary Mill conducted on March 24, 1999. The value of 47,600 dscfm was the recorded stack airflow in 1968.

1.d Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

None

Facility Name: Lorain Tubular Company LLC
Facility ID: 02-47-08-0961
Emissions Unit: No. 3 Seamless Mill Rotary Mill (P048)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None